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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/637,139  | 08/08/2003  | Charles J. Longacre  | S1097/20001         | 3431             |
| 3000  | 7590        | 12/17/2004           | EXAMINER            |                  |
| CAESAR, RIVISE, BERNSTEIN,<br>COHEN & POKOTILOW, LTD.<br>11TH FLOOR, SEVEN PENN CENTER<br>1635 MARKET STREET<br>PHILADELPHIA, PA 19103-2212 |             |                      | DUNWOODY, AARON M   |                  |
|   |             | ART UNIT             |                     | PAPER NUMBER     |
|   |             | 3679                 |                     |                  |
| DATE MAILED: 12/17/2004   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/637,139             | LONGACRE ET AL.     |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Aaron M Dunwoody       | 3679                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 September 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/13/2004.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 6173993, Shumard et al.

In regards to claim 1, Shumard et al disclose a joint restraint assembly (10) for connecting pipe ends together, or to other objects, by gripping the outer surface of the pipe, the joint restraint assembly comprising:

a body (14) encircling the pipe, with the body having a plurality of cavities adjacent the pipe and at least one set of a corresponding plurality of threaded bores disposed through the body, each threaded bore of the at least one set of a corresponding plurality of threaded bores being in communication with a respective cavity;

a segment (40) disposed within each of the cavities in the body, and configured (capable) to make contact between the body and the surface of the pipe so as to provide resistance to pipe pull-out in proportion to the mechanical or internal pressure loading applied to the pipe; and

a threaded bolt (32) extending through each of the threaded bores to pre-load the respective segment into initial contact with the pipe surface.

In regards to claim 2, Shumard et al disclose the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure being independent of the threaded bolts.

In regards to claim 3, Shumard et al disclose the segment being configured (capable) to transmit the load from the pipe to the body while loading the segment primarily in compression.

In regards to claim 4, Shumard et al disclose the segment further comprising at least one edge (52, 54) capable of penetrating the external surface of the pipe.

In regards to claim 5, Shumard et al disclose the at least one edge forming a relief angle, as measured from the pipe surface, that is 25 to 35 degrees, so as to optimize both the structural integrity of the segment edge and the ability of the edge to penetrate the pipe surface (implied).

In regards to claim 6, Shumard et al disclose the circumferential length of all of the segments and their edges comprising a substantial portion of the pipe periphery, thereby distributing the force transmitted through contact with the pipe more uniformly around the pipe periphery, and distributing the force transmitted through contact with the body more uniformly around the body, independently of said threaded bolts.

In regards to claim 7, Shumard et al disclose the shape of the body being optimized to resist the forces imparted to by contact with the segments, the body comprising: a substantially cylindrical portion adjacent to the pipe surface with flange extending radially therefrom; and wherein the body comprising a shape and wall

thickness compensate for the presence of the cavities to maintain the strength and rigidity of the body.

In regards to claim 9, Shumard et al disclose the segment comprising a cam surface (52, 54) that engages and rotates against the pipe surface to resist pipe pull-out at comparatively high levels of mechanical loading or internal pipe pressure in proportion to the loading.

In regards to claim 10, Shumard et al disclose the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure being independent of the threaded bolts.

In regards to claim 11, Shumard et al disclose the segment being configured (capable) to transmit the load from the pipe to the body while loading the segment primarily in compression.

In regards to claim 12, Shumard et al disclose a cam surface (any convenient surface) further comprising a surface texture for engaging the pipe surface.

In regards to claim 13, Shumard et al disclose the ability of the assembly to resist pipe pull-out at increasing levels of mechanical loading or internal pipe pressure is independent of the threaded bolts.

In regards to claim 14, Shumard et al disclose the segment being configured (capable) to transmit the load from the pipe to the body while loading the segment primarily in compression.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumard et al in view of Pannell et al.

In regards to claim 8, Shumard et al disclose the claimed invention except for an elastomeric material positioned between each of the segments and their corresponding cavities, the elastomeric material disposing the segment in the cavity in an optimum position. Pannell et al teach an elastomeric material (170) positioned between each of the segments (210) and their corresponding cavities, the elastomeric material disposing the segment in the cavity in an optimum position, to graduate the effecting force of the sudden application of a sliding force (col. 4, lines 25-40). As Pannell et al relate to mechanical pipe joints utilizing pipe clamping systems, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an elastomeric material positioned between each of the segments and their corresponding cavities, the elastomeric material disposing the segment in the cavity in an optimum position, to graduate the effecting force of the sudden application of a sliding force, as taught by Pannell et al.

***Response to Arguments***

Applicant's arguments filed 9/13/2004 have been fully considered but they are not persuasive.

In response to applicant's argument that a segment **configured** to make contact between the body and the surface of the pipe so as to provide resistance to pipe pull-out in proportion to the mechanical or internal pressure loading applied to the pipe; and a threaded bolt to pre-load the respective segment into initial contact with the pipe surface, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Further, it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is 703-306-3436. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P Stodola can be reached on 703-306-5771. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aaron M Dunwoody  
Examiner  
Art Unit 3679

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